

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A purified and isolated polynucleotide selected from the group consisting of:

- (a) a polynucleotide encoding a polypeptide having an amino acid sequence of SEQ ID NO: 2,
- (b) a polynucleotide which is complementary to the polynucleotide of (a), and
- (c) a polynucleotide that hybridizes with a polynucleotide of (a) or (b) under stringent conditions.

Claim 2 (previously presented): The polynucleotide of claim 1 wherein the polynucleotide comprises nucleotides selected from the group consisting of natural, non-natural and modified nucleotides.

Claim 3 (previously presented): The polynucleotide of claim 1 wherein the internucleotide linkages are selected from the group consisting of natural and non-natural linkages.

Claim 4 (previously presented): The polynucleotide of claim 1 comprising the nucleotide sequence of SEQ ID NO:1.

Claim 5 (previously presented): A polynucleotide that is an expression vector comprising a polynucleotide of claim 1.

Claim 6 (previously presented): A host cell comprising the expression vector of claim 5.

Claim 7 (previously presented): A process for expressing a MurF protein of *Pseudomonas aeruginosa* in a recombinant host cell, comprising:

- (a) transforming a suitable host cell with an expression vector of claim 5; and,
- (b) culturing the host cell of step (a) in conditions under which allow expression of said the MurF protein from said expression vector.

Claim 8 (previously presented): A purified and isolated polypeptide having an amino acid sequence of SEQ ID NO:2.

Claim 9 (currently amended): A method of determining whether a candidate compound is an inhibitor of a *Pseudomonas aeruginosa* MurF polypeptide comprising:

- (a) providing at least one host cell harboring an expression vector that includes a polynucleotide encoding a polypeptide having an amino acid sequence of SEQ ID NO: 2, ~~and~~
- (b) contacting at least one of said cells with the candidate to permit the interaction of the candidate with the MurF polypeptide, and
- (c) determining whether the candidate is an inhibitor of the MurF polypeptide by ascertaining the relative activity of the polypeptide in the presence of the candidate.

Claim 10 (previously presented): The method of claim 9 wherein the polynucleotide has the nucleotide sequence of SEQ ID NO:1.

Claim 11 (previously presented): The method of claim 9 wherein in step (c) the relative activity is determined by comparing a measurement of MurF polypeptide activity of at least one cell before step (b) to a measurement of MurF polypeptide activity of at least one cell after step (b).

Claims 12-14 (canceled)

Claim 15 (currently amended): A method of determining whether a candidate compound is an inhibitor of a *Pseudomonas aeruginosa* MurF polypeptide comprising:

(a) providing a sample that includes a MurF polypeptide having an amino acid sequence of SEQ ID NO: 2, and

(b) contacting said sample with the candidate to permit the interaction of the candidate with the MurF polypeptide, and

(c) determining whether the candidate is an inhibitor of the MurF polypeptide by ascertaining the relative activity of the MurF polypeptide in the presence of the candidate.

Claim 16 (previously presented): The method of claim 15 wherein the polypeptide has the amino acid sequence of SEQ ID NO:2.

Claim 17 (previously presented): The method of claim 15 wherein in step (c) the relative activity is determined by comparing a measurement of MurF polypeptide activity of the sample before step (b) to a measurement of MurF polypeptide activity of the sample after step (b).